

## CLAIMS

What is claimed is:

1. A retainer for immobilizing a bucket against rotational and other movements such as during the time that material contained within the bucket is mixed, comprising:

a vertically axised retainer ring which forms a cylindrically-shaped socket into which the bucket may be placed;

laterally outwardly extending, generally flat wings formed on opposite sides of the ring;

said ring having an interior, circularly-shaped wall surface having upper and lower edges, which taper downwardly and inwardly from the upper to the lower edges, relative to the axis of the ring, with the diameter of the upper edge being larger than the anticipated diameter of a bucket and the diameter of the lower edge, and the diameter of the lower edge being smaller than the anticipated diameter of the bucket;

whereby a bucket containing material to be mixed, such as liquid paint and the like, is inserted in the socket so that the bucket engages and frictionally locks to portions of the inner surface of the wall, and the user of the retainer may step upon the wings to firmly press the wings and, thereby, hold the retainer, against a surface upon which the retainer may be positioned, and to position the user generally over the bucket so that the user may insert and hold a mixing device in the bucket for mixing the material while simultaneously holding

the bucket against rotational or other movements that might otherwise have occurred if the bucket were free to move.

2. A retainer for immobilizing a bucket, as defined in Claim 1 above, comprising:

said ring wall being formed of a resilient, plastic material, which compresses radially inwardly against the bucket for frictionally gripping the bucket and holding it against movement relative to the ring.

3. A retainer for immobilizing a bucket, such as during the time that the content of the bucket is mixed, as defined in Claim 1 above, comprising:

and said interior wall surface being tapered to provide a Morse-type taper of approximately 2 degrees, so that the diametrically opposite portions of the wall surface, that is, on opposite diametric ends of the bucket, together provide an internal taper of approximately 4 degrees for locking the wall-engaged portions of the bucket against movement relative to the socket.

4. A retainer for immobilizing a bucket, as defined in Claim 1 above, comprising:

said taper of the ring interior wall surface being formed with a Morse-type taper of a slope angle which frictionally locks the bucket to the wall surface to prevent the bucket from rotational or other movement during the mixing.

5. A retainer for immobilizing a bucket, as defined in Claim 1, comprising:

said wings being formed with flat upper surfaces upon which the user's feet may be positioned, and with the lower surfaces of said wings having downwardly extending protuberances for engaging against a ground support surface upon which the retainer is positioned.

6. A retainer for immobilizing a bucket, as defined in Claim 1, comprising:

and the interior wall of said wing being formed with at least two coaxial upper and lower generally cylindrically tapered portions, with the upper cylindrically tapered portion being of a larger diameter than the lower cylindrically tapered portion, and thereby forming different diameter socket portions, so that at least two different diameter buckets may be engaged by, and retained within, the socket portions within which the bucket more closely fits.

7. A retainer for immobilizing a bucket, such as during the time that the contents of the bucket are mixed, or to prevent accidental tipping of the bucket, comprising:

a vertically axised, ring formed of two thin, concentric, generally cylindrically-walls joined together along their upper edges and being free of each other at their lower edges too thereby form a circular socket having an inner and outer wall;

said inner wall having an inner wall surface that is tapered downwardly and radially inwardly from its upper edge to its lower edge and being of a diameter to receive and hold a predetermined size bucket with the bucket engaging the inner wall inner surface and being frictionally gripped by the inner wall;

said outer wall having at least one radially outwardly extending wing formed thereon, with said wing having a generally flat upper surface of a size to accommodate at least one foot of the user of the retainer so as to press down and clamp the wing down against a support surface on which the retainer is positioned and, thereby, prevent movement of the retainer relative to the support surface, and correspondingly hold the bucket inserted within the retainer socket against movements during the time the contents of the retainer are mixed.

8. A retainer as defined in Claim 7, and including radially oppositely extending wings joined to the lower edge of the outer wall for positioning and holding the retainer socket upon said support surface by downward pressure of the user's feet upon the wings and for, thereby, positioning the user generally above the socket for manually inserting a mixing device into the bucket that is retained within the retainer socket while preventing the retainer from moving during the mixing.

9. A retainer as defined in Claim 7, and with the interior surface of the interior wall defining the socket being provided with a Morse-type taper of a slope angle which frictionally locks the bucket to said wall surface for preventing the bucket from rotational movement during the mixing.

10. A retainer as defined Claim 9, above, and including said Morse-type taper being approximately 2 degrees so as to provide an approximately 4 degree-taper for diametrically opposite surfaces of the socket.

11. A retainer as defined in Claim 7, above, and including said retainer being formed of a slightly resilient plastic material so that the inner wall of the socket expands outwardly slightly upon insertion of a bucket into the socket and, therefore, exerts a radially inwardly directed force which grips the bucket radially inwardly and holds the bucket against rotational movement within the socket.

12. A retainer as defined in Claim 7, and with the interior wall of said ring being formed with at least two coaxial upper and lower, generally cylindrically-shaped, tapered portions with the upper cylindrically-shaped tapered portion being of a larger diameter than the lower cylindrically-shaped tapered portion, to thereby form upper and lower socket portions of different diameters whereby at least two different sized buckets may be inserted within and retained within the particular socket portion within which it most clearly fits.

13. A retainer for immobilizing a bucket against rotational and lateral movements and accidental tipping such as during the time that material contained within the bucket is mixed or used or transported, comprising:

a vertically axised retainer ring which forms a cylindrically-shaped socket of a size to receive and surround the circumference of a bucket which may be placed therein;

said ring having an interior, circularly-shaped wall surface having upper and lower edges, which taper downwardly and inwardly from the upper to the lower edges, relative to the axis of the ring, with the diameter of the upper edge being larger than the anticipated diameter of a bucket and the diameter of the lower edge, and the diameter of the lower edge being smaller than the anticipated diameter of the bucket;

a laterally outwardly extending, generally flat wing formed on the lower edge of the ring, the ring being of sufficient size to hold a user's foot;

whereby a bucket containing a liquid material, such as liquid paint and the like, is inserted in the socket so that the bucket engages and frictionally locks to portions of the inner surface of the wall, and the user of the retainer may stand upon the wing to firmly press the wing and, thereby, hold the retainer, against a support surface upon which the retainer may be positioned, and to position the user generally over the bucket so that the weight of the user clamps the retainer against the support surface.



14. A retainer for immobilizing a bucket, as defined in Claim 13, comprising:

said ring wall being formed of a resilient, plastic material, which compresses radially inwardly against the bucket for frictionally gripping the bucket and holding it against movement relative to the ring.

15. A retainer for immobilizing a liquid containing bucket during the time that the liquid contents of the bucket is mixed, as defined in Claim 13, comprising:

said taper of the ring interior wall surface being formed with a downwardly and radially inwardly sloping taper of a slope angle which frictionally locks the bucket to the wall surface to prevent the bucket from rotational or other movement relative to the retainer during the mixing.

16. A retainer for immobilizing a bucket, as defined in Claim 15, comprising:

said wing being extending laterally outwardly of opposite sides of the ring and being formed with flat upper surfaces upon which the retainer user's feet may be positioned so that the user's feet may be positioned on opposite sides of the ring for clamping the retainer downwardly against a ground support surface upon which the retainer is positioned.

17. A retainer for immobilizing a bucket, as defined in Claim 1, comprising:

and the interior wall of said wing being formed with coaxial upper and lower generally cylindrically tapered portions, with the upper being of a larger diameter than the lower portion for forming different diameter socket portions for receiving and retaining different diameter buckets.